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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,235	07/31/2003	William C. Bushong	780396.92531	1731

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EXAMINER
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KALAFUT, STEPHEN J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/631,235	<b>Applicant(s)</b> BUSHONG ET AL.	
	<b>Examiner</b> Stephen J. Kalafut	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-77 is/are pending in the application.  
     4a) Of the above claim(s) 42-77 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-36, 40 and 41 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 16-27, 30-33 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 13, 15, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>26 Jan 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

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Claims 9, 11, 12, 15, 24, 27, 30 and 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9, 11, 12, 15, 24, 27, 30 and 37-39 contain the trademark/trade names PD-34 and/or SS24600. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe conductive carbon inks and, accordingly, the identification/description is indefinite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughen *et al.* (US 5,747,192).

Hughen *et al.* disclose a cell (10) that includes an alkaline electrolyte, (column 6, lines 5-10), positive (18) and negative (20) terminals defined by a can (16), and a label (24) surrounding

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the outer periphery of the can. See figures 1A and 2. The label includes an adhesive layer (30), a pigment layer (28) and outer film (26) that would be abrasion-resistant. The pigment layer is made of inks, which may be formed side-by-side, thus forming bands (column 6, lines 19-27), some of which would be located close to the negative end of the cell. Since these are all different materials, they would have different resistances. Additional inks may be used to form intelligent indicia (column 5, lines 59-61).

Claims 1, 6 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by either Abe *et al.* (US 5,725,966) or Weiss *et al.* (US 6,127,024).

Abe *et al.* disclose a cell (16) that includes two terminals (16a, 16b) defined by a can, and a label (10) surrounding the outer periphery of the can. See figures 5 and 7. The label includes an adhesive layer (3), a base layer (1), an ink layer (4) and outer varnish layer (5) that would be abrasion-resistant. Since these are all different materials, they would have different resistances. See column 4, lines 20 through 30. Because the ink layer runs through the entire area of the label, it would form a band, and would be proximate the negative end.

Weiss *et al.* disclose a cell (10) that includes positive (16) and negative terminals defined by a can, and a label (18) surrounding the outer periphery of the can. See column 3, lines 26-32 and figure 1. The label includes a base layer (20), a graphics layer (22) that may include a metallized layer (32) or an ink layer (30), and outer varnish layer (24) that would be abrasion-resistant. Since these are all different materials, they would have different resistances. The ink layer may form geometric patterns extending across the label (figure 2), thus forming a band, part of which would be located proximate to the negative end.

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Claims 1, 2, 6, 7, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Treger (US 5,543,246).

Treger discloses a cell (2) that includes an alkaline electrolyte, (column 2, line 3), positive (12) and negative (11) terminals defined by a can (5), and a label (80) surrounding the outer periphery of the can. See column 3, lines 27-29 and the sole figure. The label includes a condition indicator (8), which comprises a base layer (20), a resistive layer (30) and an outer polymeric film (40) that would be abrasion-resistant. The resistive layer includes conductive ink (column 3, lines 6-9), which would have a lower resistance than the rest of the label. This layer, along with the rest of the condition indicator, forms a band that extends toward, and is thus proximate to, the negative terminal (11).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Huguen *et al.*, Abe *et al.*, Weiss *et al.* or Treger.

These references do not mention all of the types of cell systems recited in this claim. However, because these systems are common types that are conventional in the art, and because the labels disclosed by the references are part of the cell housings, this claim would be considered obvious over these references.

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Claims 3, 4, 11, 18, 19, 21, 22 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treger.

These claims differ from Treger by reciting resistance values for the ink. Since Treger teaches that his resistance layer forms an electrical circuit that heats a thermochromic layer (column 3, lines 11-14), determining an optimal resistance value for this layer would be desirable to the ordinary artisan. For this reason, these claims would be obvious over Treger.

Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treger in view of Iwaizono *et al.* (US 6,322,921).

These claims differ from Treger by reciting a switch that disconnects the positive terminal upon excessive pressure. Iwaizono *et al.* discloses a cell that includes a positive terminal (22) from an internal lead (25) upon excessive pressure (column 7, lines 52-54). To obtain the safety provided by this circuit breaker, it would be obvious to use the device that disconnects the positive terminal as shown by Iwaizono *et al.* in the cell of Treger.

Claims 8-10, 12 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treger in view of Kiernan *et al.* (US 4,723,656).

These claims differ from Treger by reciting carbon as the material of the conductive ink, and specific brands of carbon for this material. Kiernan *et al.* disclose carbon as a material for conductive ink, as an alternative for silver and nickel (column 5, lines 5-7). Because Treger discloses conductive ink that includes silver or nickel, it would be obvious to use in its place the

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conductive carbon ink of Kiernan *et al.* Once intent upon using carbon, the skilled artisan would be able to select an appropriate brand and composition thereof, including mixtures.

Claims 13, 15, 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art cited either herein or by applicant does not disclose a battery with a label that includes stacked layers of different carbon inks.

Claims 15 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. These claims also recite the battery with a label that includes stacked layers of different carbon inks.

Claims 34-36, 40 and 41 are allowed. The prior art does not disclose a cell with a label that has a band whose resistance identifies the cell as one that has a pressure responsive switch.

Claims 37-39 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. These claims depend on allowable claim 34.

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Claims 42-77 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

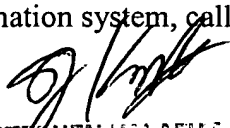
Election was made **without** traverse in the reply filed on 10 July 2006.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shacklette (US 5,952,122) discloses a battery label with parallel metal bands.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
STEPHEN KALAFUT  
PRIMARY EXAMINER  
GROUP 1700